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REMARKS

Claims in the case are 1-14. Claims 1-14 have been amended herein as to form, for example, by introducing indentation, indefinite and definite articles, and replacing multiple dependencies with single dependencies. Basis for the additions to Claim 8 herein (e.g., S¹, T¹ etc.) are found in Claim 7, and at page 9, lines 6-20 of the specification.

The specification has been amended to include section headings, in accordance with accepted practice before the Office. Basis for the Brief Description of the Drawing inserted herein on page 3 of the specification is found at page 27, lines 5-16, and page 28, lines 12-19 of the specification. The title has been changed to correspond to that of the related International Patent Publication No. WO 00/60586. Page 1 of the application has been amended herein to introduce cross reference information. The cross reference information is presented in accordance with 37 C.F.R. 1.78(a)(2) (Federal Register / Vol. 65, No. 183 / Wednesday, September 20, 2000; Changes to Implement Eighteen-Month Publication of Patent Applications; Final Rule). An abstract of the disclosure is also included herewith on a separate page.

The amendments presented herein are not believed to represent the entry of new matter into the application. Applicants respectfully request entry of this preliminary amendment.

Respectfully submitted,

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VERSIONS WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION: (Marked-Up)

The following are changes and additions made to the specification.

The following is a version of the title of the application on line 1 of page 1, showing changes made thereto herein.

[Optical recording material for blue lasers which can be rewritten on]

ERASABLE OPTICAL RECORDING MATERIAL FOR BLUE LASERS

Line 1 of page 30 of the specification has been amended as follows. [Patent claims] WHAT IS CLAIMED IS:

IN THE CLAIMS: (Marked-Up)

The following are versions of the amended claims with markings to show changes made thereto in the present Preliminary Amendment.

- 1. (Once Amended, Marked-Up) An [O]optical recording material for at least one of binary, [and/or] multibit and[/or] volume data storage, comprising:
 - (a) at least one <u>dyestuff selected from</u> polymeric <u>azo dyestuffs</u> and[/or] oligomeric azo dyestuffs, [which] <u>said dyestuff</u> chang[es]<u>ing</u> its spatial arrangement <u>upon irradiation</u> with polarized electromagnetic radiation[,]; and
 - (b) optionally at least one grouping having form anisotropy, [characterized in that]

wherein

[-] (i) the absorption maximum of the dyestuff is at least <u>one of, at least 30 nm</u>[, preferably 40 nm, different from] <u>less than</u> 400 nm <u>and at least 30 nm greater than 400 nm</u>, [and]

-12-

Mo-6633

- [-] (ii) at 400 nm the dyestuff reaches an optical density of not more than 60% of its absorption maximum, [and]
- [-] (iii) [there is] said optical recording material has the capacity for being rewritten on by changing the state of polarization of [the] actinic light, an intensity of at least 80% of the original value being achieved after a deletion/rewriting cycle, and
- [-] (iv) wherein at 400 nm, under [otherwise] identical conditions, [the] an optical writing operation upon said optical recording material proceeds no more slowly than at 500 nm, and birefringence values induced [here] during said optical writing operation do not differ from those birefringence values induced at 500 nm by more than 10%.
- 2. (Once Amended, Marked-Up) <u>The [R]recording material [according to claim 1, characterized in that] of Claim 1 wherein the absorption maximum [(AM)] of the dyestuff is less than 370 nm[, preferably 360 nm].</u>
- 3. (Once Amended, Marked-Up) <u>The [R]recording material [according to claim 1, characterized in that] of Claim 1 wherein the absorption maximum of the dyestuff is greater than 450 nm.</u>
- 4. (Once Amended, Marked-Up) The [R]recording material [according to claim 1, characterized in that] of Claim 1 wherein it comprises a copolymer which comprises at least one component of which the [AM] absorption maximum is greater than 450 nm, and at least one component of which the [AM] absorption maximum is less than 360 nm.
- 5. (Once Amended, Marked-Up) The [R]recording material [according to one or more of claims 1 to 4, characterized in that] of Claim 1 wherein in the solid state at a thickness of 250 nm [it] said recording material has an optical density of ≤ 1 , Mo-6633



[preferably less than or equal to 0.5, especially preferably less than or equal to 0.3,] at a wavelength in a wavelength range from 380 to 420 nm[, preferably 390 to 410 nm, especially preferably 395 to 405 nm].

- 6. (Once Amended, Marked-Up) The [R]recording material [according to one or more of claims 1 to 5, characterized in that] of Claim 1 wherein said optical recording material is optically written upon using [the] electromagnetic radiation that is light in [the] a laser wavelength range of [preferably] between 380 to 420 nm[, particularly preferably between 390 and 410 nm, especially preferably between 395 and 405 nm].
- 7. (Once Amended, Marked-Up) <u>The [R]recording material [according to any one of claims 1 to 6, characterized in that] of Claim 1 wherein the [chemically bonded] dyestuff corresponds to the formula (I):</u>

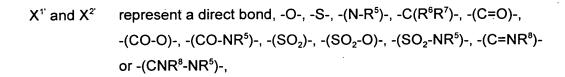
$$X^1$$
 $(R^1)_m$
 (I)

wherein

R¹ and R² independently of one another represent hydrogen or a nonionic substituent, [and]

m and n independently of one another represent an integer from 0 to 4[, preferably 0 to 2, where].

X¹ and X² denote X¹'-R³ or X²'-R⁴, [and]



R³, R⁴, R⁵ and R⁵ independently of one another represent hydrogen, $C_{1^-} \text{ to } C_{20}\text{-alkyl}, \ C_{3^-} \text{ to } C_{10}\text{-cycloalkyl}, \ C_{2^-} \text{ to } C_{20}\text{-alkenyl}, \ C_{6^-} \text{ to } C_{10}\text{-aryl}, \ C_{1^-} \text{ to } C_{20}\text{-alkyl-}(C=O)\text{-, } C_{3^-} \text{ to } C_{10}\text{-cycloalkyl-}(C=O)\text{-, } C_{2^-} \\ \text{to } C_{20}\text{-alkenyl-}(C=O)\text{-, } C_{6^-} \text{ to } C_{10}\text{-aryl-}(C=O)\text{-, } C_{1^-} \text{ to } C_{20}\text{-alkyl-} \\ \text{(SO}_2)\text{-, } C_3\text{- to } C_{10}\text{-cycloalkyl-}(SO_2)\text{-, } C_{2^-} \text{ to } C_{20}\text{-alkenyl-}(SO_2)\text{- or } \\ C_{6^-} \text{ to } C_{10}\text{-aryl-}(SO_2)\text{-, } [\text{or}]$

 $X^{1'}$ - R^3 and $X^{2'}$ - R^4 can represent hydrogen, halogen, cyano, nitro, CF_3 or CCI_3 ,

R⁶ and R⁷ independently of one another represent hydrogen, halogen, C_1 -to C_{20} -alkyl, C_1 - to C_{20} -alkoxy, C_3 - to C_{10} -cycloalkyl, C_2 - to C_{20} -alkenyl or C_6 - to C_{10} -aryl[.].

wherein the sensitivity of the dyestuff to actinic light after [the] induced birefringence has been written in is retained at a final value, and this sensitivity is at least 5%[, preferably 10%, particularly preferably 15%, especially preferably 20%] of the original value when the longitudinal axis of the molecule lies perpendicular to the direction of polarization of the actinic light.

8. (Once Amended, Marked-Up) <u>The [R]recording material [according to any one of claims 1 to 7, characterized in that] of Claim 1 wherein said recording material is prepared from at least one monomer of the formula (II).</u>

wherein

R represents hydrogen or methyl, [and]

[the other radicals have the above-mentioned meaning,

has been used in the preparation]

- S¹ represents a direct bond, -O-, -S- or -NR⁹-,
- T¹ represents -(CH₂)_p-, where the chain can be interrupted by -O-, -NR⁹- or -OSiR¹⁰₂O-,

- i represents an integer from 0 to 4, where for i > 1 the individual Q¹ can have different meanings,
- X² represents X¹'-R³ or X²'-R⁴,

<u>X¹'</u> and X²' each independently represent a direct bond, -O-, -S-, -(N-R 5)-, -<u>C(R 6 R 7)-, -(C=O)-, -(CO-O)-, -(CO-NR 5)-, -(SO $_2$)-, -(SO $_2$ -O)-, -(SO $_2$ -NR 5)-, -(C=NR 8)- or -(CNR 8 -NR 5)-,</u>

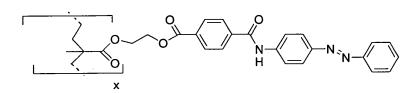
R¹ and R² each independently represent hydrogen or a nonionic substituent, R³ and R⁴ each independently represent hydrogen, C_1 - to C_{20} -alkyl, C_3 - to C_{10} -cycloalkyl, C_2 - to C_{20} -alkenyl, C_6 - to C_{10} -aryl, C_1 - to C_{20} -alkyl-(C=O)-, C_2 - to C_{20} -alkenyl-(C=O)-, C_6 - to C_{10} -aryl-(C=O)-, C_6 - to C_{10} -aryl-(C=O)-, C_1 - to C_{20} -alkyl-(SO₂)-, C_3 - to C_{10} -cycloalkyl-(SO₂)-, C_2 - to C_{20} -alkenyl-(SO₂)-, and

m and n each independently represent an integer from 0 to 4.

9. (Once Amended, Marked-Up) <u>The [R]recording material [according to any one of claims 1 to 8, characterized in that] of Claim 1 wherein it comprises at least one [of the] polymer[s of the] <u>selected from formulas XIII to XX.</u></u>

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[e.g. x=22 mol%]

$$N-N-N$$

[e.g. y=30 mol%]

[e.g. z=48 mol%]

XVII



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wherein the compositions in the co- and terpolymers can vary, provided that x + y adds up to 100 mol%, or x + y + z adds up to 100 mol%.

10. (Once Amended, Marked-Up) <u>The [R]recording material [according to claim 9, characterized in that] of Claim 9 wherein</u>

p is between 10 and 1,000, [and/or]

in the case of the copolymers, the molar ratio of x: y is between 10:90 and 90:10, [preferably between 30:70, particularly preferably between 40:60 and 60:40, and especially preferably 50:50,] and[/or]

in the case of terpolymers, x + y is greater than 10 mol%[, preferably greater than 20 mol%, particularly preferably greater than 30 mol%].

- 11. (Once Amended, Marked-Up) <u>A</u> [S]storage system[, characterized in that it] compris[es]ing [a] the recording material [according to any of claims 1 to 10] of Claim 1.
- 12. (Once Amended, Marked-Up) <u>The [S]storage system [according to claim 11, characterized in that] of Claim 11 wherein the recording material comprises one or more unsupported objects of any desired shape[, preferably an unsupported flat structure, particularly preferably an unsupported film, a multi-layer build-up preferably comprising at least one substrate layer].</u>
- 13. (Once Amended, Marked-Up) <u>The [S]storage system [according to claim 11, characterized in that] of Claim 11 wherein it also additionally comprises a reflection layer.</u>
- 14. (Once Amended, Marked-Up) A [P]process for the production of the storage system [according to at least one of claims 11 or 12, or 13, characterized in that it] of Claim 11 wherein said process comprises [a step in which] applying the storage medium [is applied] by spin-coating.